

## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/572, 348

Source: 1FWP

Date Processed by STIC: 02/08/2007

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER</u> <u>VERSION 4.4.0 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (<a href="http://www.uspto.gov/ebc/efs/downloads/documents.htm">http://www.uspto.gov/ebc/efs/downloads/documents.htm</a>, EFS Submission

  User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
   U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06



## Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: 10/572, 348
attn: New Rules Cases: Please disregard english "Alpha" Headers, which were inserted by Pto Software	
1Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
3Misaligned Amino Numbering	The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
4Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
5Variable Length	Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6Patentln 2.0 "bug"	A "bug" in Patenthn version 2.0 has caused the <220><223> section to be missing from amino acid sequences(s) Normally, Patenthn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220><223> section to the subsequent amino acid sequence. This applies to the mandatory <220><223> sections for Artificial or Unknown sequences.
7Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:  (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  This sequence is intentionally skipped  Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
8Skipped Sequences (NEW RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000
9Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing.  Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
lo Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown Artificial Sequence or scientific name (Genus/species). <220><223> section is required when <213> response is Unknown or is Artificial Sequence. (see item 11 below)
11Use of <220>	Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <13> "Organism" response is "Artificial Sequence" or "Unknown. Please explain source of genetic material in <220> to <223> section or use "chemically synthesized" as explanation. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32), also Sec. 1.823 of Sequence Rules
Patentin 2.0 'bug'	Please do not use "Copy to Disk" function of Patentin version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13 Misuse of n/Xaa	"n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid

AMC - STIC Systems Branch - 03/02/06





IFWE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/572,348

DATE: 02/08/2007

TIME: 11:42:29

Input Set: A:\sequence listing.txt
Output Set: B:\CRF4\02082007\J572348.raw

```
3 <110> APPLICANT: Novo Nordisk A/S
      5 <120> TITLE OF INVENTION: Novel GLP-1 derivatives
      7 <130> FILE REFERENCE: 6692-WO
      9 <140> CURRENT APPLICATION NUMBER: US/10/572,348
     9 <141> CURRENT FILING DATE: 2006-03-17
                                                                 Does No Comply
                                                                  Corrected Diskette Needed
      9 <160> NUMBER OF SEQ ID NOS: 5
     11 <170> SOFTWARE: PatentIn version 3.1
     13 <210> SEQ ID NO: 1
     14 <211> LENGTH: 31
     15 <212> TYPE: PRT
     16 <213> ORGANISM: Homo sapiens
     18 <400> SEQUENCE: 1
     20 His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
     21 1
     24 Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
                                                  Gradial Responses one At
L 2137 Responses one Free
Unlenavors of Genus Free
Unlenavors of Genus Free
     25
     28 <210> SEQ ID NO: 2
     29 <211> LENGTH: 40
     30 <212> TYPE: PRT
    31 <213> ORGANISM: (Synthetic construct
     33 <220> FEATURE:
     34 <221> NAME/KEY: MISC_PEATURE
     35 <222> LOCATION: (1)..(1)
     36 <223> OTHER INFORMATION: Xaa at position 1 is L-histidine, D-histidine, desamino-
histidine
               , 2-amino-histidine, beta-hydroxy-histidine, homohistidine, N-alp
     37
              ba-acetyl-histidine, alpha-fluoromethyl-histidine, alpha-methyl-h
     38
              istidine, 3-pyridylalanine, 2-pyridylalanine, or 4-pyridylalanine
     39
  -> 40
     43 <220> FEATURE:
     44 <221> NAME/KEY: NISC_FEATURE
     45 <222> LOCATION: (2)..(2)
     46 <223> OTHER INFORMATION: Xaa at position 2 is Ala, Gly, Val, Leu, Ile, Lys, Aib, (1-
aminoc
              yclopropyl) carboxylic acid, (1-aminocyclobutyl) carboxylic acid,
     47
              (1-aminocyclopentyl) carboxylic acid, (1-aminocyclohexyl) carboxy
     48
     49
              lic acid, (1-aminocycloheptyl) carboxylic acid or (1-aminocyclooc
              tyl) carboxylic acid.
  -> 50
     53 <220> FEATURE:
     54 <221> NAME/KEY: MISC PEATURE
     55 <222> LOCATION: (10)..(10)
     56 <223> OTHER INFORMATION: Xaa at position 10 is Val or Leu.
     59 <220> FBATURE:
     60 <221> NAME/KEY: MISC_FEATURE
```

61, <222> LOCATION: (12)..(12)

RAW SEQUENCE LISTING DATE: 02/08/2007 PATENT APPLICATION: US/10/572,348 TIME: 11:42:29

Input Set: A:\sequence listing.txt
Output Set: B:\CRF4\02082007\J572348.raw

62 <223> OTHER INFORMATION: Xaa at position 12 is Ser, Lys or Arg. 65 <220> FEATURE: 66 <221> NAME/KBY: MISC FEATURE 67 <222> LOCATION: (13)..(13) 68 <223> OTHER INFORMATION: Mas at position 13 is Tyr or Gln. 71 <220> FEATURE: 72 <221> NAME/KEY: MISC\_FEATURE 73 <222> LOCATION: (14)..(14) 74 <223> OTHER INFORMATION: Xaa at position 14 is Leu or Met. 77 <220> FEATURE: 78 <221> NAME/KEY: MISC\_FEATURE 79 <222> LOCATION: (16)..(16) 80 <223> OTHER INFORMATION: Kaa at position 16 is Gly, Glu or Aib. 83 <220> FEATURE: 84 <221> NAME/KEY: MISC\_FEATURE 85 <222> LOCATION: (17) .. (17) 86 <223> OTHER INFORMATION: Maa at position 17 is Gln, Glu, Lys or Arg. 89 <220> FEATURE: 90 <221> NAME/KEY: MISC\_FEATURE 91 <222> LOCATION: (19)..(19) 92 <223> OTHER INFORMATION: Xaa at position 19 is Ala or Val. 95 <220> FEATURE: 96 <221> NAME/KBY: MISC\_FEATURE 97 <222> LOCATION: (20)..(20) 98 <223> OTHER INFORMATION: Xaa at position 20 is Lys, Glu or Arg. 101 <220> FEATURE: 102 <221> NAME/KBY: MISC\_FEATURE 103 <222> LOCATION: (21)..(21) 104 <223> OTHER INFORMATION: Xaa at position 21 is Glu or Leu. 107 <220> FEATURE: 108 <221> NAME/KEY: MISC\_FEATURE 109 <222> LOCATION: (24) .. (24) 110 <223> OTHER INFORMATION: Xea at position 24 is Ala, Glu or Arg. 113 <220> FEATURE: 114 <221> NAME/KBY: MISC\_PEATURE 115 <222> LOCATION: (27)..(27) 116 <223> OTHER INFORMATION: Xaa at position 27 is Val or Lys. 119 <220> FEATURE: 120 <221> NAME/KBY: MISC FEATURE 121 <222> LOCATION: (28) ... (28) 122 <223> OTHER INFORMATION: Maa at position 28 is Lys, Glu, Asn or Arg. 125 <220> FEATURE: 126 <221> NAME/KBY: MISC\_FRATURE 127 <222> LOCATION: (29) .. (29) 128 <223> OTHER INFORMATION: Xaa at position 29 is Gly or Aib. 131 <220> FEATURB: 132 <221> NAME/KBY: MISC\_FEATURE 133 <222> LOCATION: (30),.(30)

134 <223> OTHER INFORMATION: Xaa at position 30 is Arg, Gly or Lys.

DATE: 02/08/2007

TIME: 11:42:29

Input Set : A:\sequence listing.txt Output Set: N:\CRF4\02082007\J572348.raw 137 <220> FEATURE: 138 <221> NAME/KEY: MISC\_FEATURE 139 <222> LOCATION: (31)..(31) 140 <223> OTHER INFORMATION: Kas at position 31 is Gly, Ala, Glu, Pro, Lys, amide or is absent 141 144 <220> FEATURE: 145 <221> NAME/KEY: MISC FEATURE 146 <222> LOCATION: (32)..(32) 147 <223> OTHER INFORMATION: Xaa at position 32 is Lys, Ser, amide or is absent. 150 <220> FEATURE: 151 <221> NAME/KEY: MISC\_FEATURE 152 <222> LOCATION: (33)..(33) 153 <223> OTHER INFORMATION: Kaa at position 33 is Ser, Lys, amide or is absent. 156 <220> PEATURE: 157 <221> NAME/KEY: MISC\_FEATURE 158 <222> LOCATION: (34) .. (34) 159 <223> OTHER INFORMATION: Xea at position 34 is Gly, amide or is absent. 162 <220> FEATURE: 163 <221> NAME/KBY: MISC\_FEATURE 164 <222> LOCATION: (35)..(35) 165 <223> OTHER INFORMATION: Xaa at position 35 is Ala, amide or is absent. 168 <220> PEATURE: 169 <221> NAME/KBY: MISC\_FEATURE 170 <222> LOCATION: (36)..(36) 171 <223> OTHER INFORMATION: Xaa at position 36 is Pro, amide or is absent. 174 <220> PEATURE: 175 <221> NAME/KEY: MISC\_FEATURE 176 <222> LOCATION: (37)..(37) . 177 <223> OTHER INFORMATION: Xaa at position 37 is Pro, amide or is absent. 180 <220> FEATURE: 181 <221> NAME/KEY: MISC\_FEATURE 182 <222> LOCATION: (38)..(38) 183 <223> OTHER INFORMATION: Xaa at position 38 is Pro, amide or is absent. 186 <220> FEATURE: 187 <221> NAME/KEY: MISC\_FEATURE 188 <222> LOCATION: (39)..(39) 189 <223> OTHER INFORMATION: Xaa at position 39 is Ser, amide or is absent. 192 <220> FEATURE: 193 <221> NAME/KBY: MISC\_PEATURE 194 <222> LOCATION: (40) .. (40) 195 <223> OTHER INFORMATION: Xaa at position 40 is amide or is absent. 198 <400> SEQUENCE: 2 > 200 Xaa Xaa Glu Gly Thr Phe Thr Ser Asp Xaa Ser Xaa Xaa Xaa Glu Xaa

204 Xaa Ala Xaa Xaa Xaa Phe Ile Xaa Trp Leu Xaa Xaa Xaa Xaa Xaa Xaa

25

RAM SEQUENCE LISTING

PATENT APPLICATION: US/10/572,348

35

212 <210> SEQ ID NO: 3

209

205 20 208 Xaa Xaa Xaa Xaa Xaa Xaa Xaa

DATE: 02/08/2007

TIMB: 11:42:29

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Input Set : A:\sequence listing.txt
                    Output Set: N:\CRF4\02082007\J572348.raw
     213 <211> LENGTH: 32
                                                    -> Same Encr
     214 <212> TYPE: PRT
     215 <213> ORGANISM: (Synthetic construct
     217 <220> FEATURE:
     218 <221> NAMB/KEY: MISC_FEATURE
     219 <222> LOCATION: (1)..(1)
     220 <223> OTHER INFORMATION: Kaa at position 1 is L-histidine, D-histidine, desamino-
histidine
               , 2-amino-histidine, beta-hydroxy-histidine, homohistidine, N-alp
    221
              ha-acetyl-histidine, alpha-fluoromethyl-histidine, alpha-methyl-h
    222
              istidine, 3-pyridylalanine, 2-pyridylalanine, or 4-pyridylalanine
    223
W--> 224
    227 <220> FEATURE:
     228 <221> NAME/KEY: MISC_FEATURE
     229 <222> LOCATION: (2)..(2)
     230 <223> OTHER INFORMATION: Xaa at position 2 is Ala, Gly, Val, Leu, Ile, Lys, Aib, (1-
aminoc
               yclopropyl) carboxylic acid, (1-aminocyclobutyl) carboxylic acid,
    231
               (1-aminocyclopentyl) carboxylic acid, (1-aminocyclohexyl) carboxy
    232
               lic acid, (1-aminocycloheptyl) carboxylic acid or (1-aminocyclooc
    233
               tyl) carboxylic acid.
W--> 234
     237 <220> FBATURE:
     238 <221> NAME/KEY: MISC_PEATURE
     239 <222> LOCATION: (12) .. (12)
     240 <223> OTHER INFORMATION: Xaa at position 12 is Ser, Lys or Arg.
    243 <220> PEATURE:
    244 <221> NAME/KEY: MISC FEATURE
    245 <222> LOCATION: (16) .. (16)
     246 <223> OTHER INFORMATION: Xaa at position 16 is Gly, Glu or Aib.
    249 <220> FEATURE:
    250 <221> NAME/KBY: MISC_FEATURE
     251 <222> LOCATION: (17) .. (17)
     252 <223> OTHER INFORMATION: Xaa at position 17 is Gln, Gly, Lys or Arg.
    255 <220> FRATURE:
    256 <221> NAME/KBY: MISC_FEATURE
     257 <222> LOCATION: {20}..(20)
     258 <223> OTHER INFORMATION: Xaa at position 20 is Lys, Glu or Arg.
     261 <220> FBATURE:
     262 <221> NAME/KEY: MISC_FEATURE
     263 <222> LOCATION: (24) .. (24)
     264 <223> OTHER INFORMATION: Xaa at position 24 is Ala, Glu or Arg.
    267 <220> FEATURE:
    268 <221> NAME/KEY: MISC_FEATURE
    269 <222> LOCATION: (28)..(28)
    270 <223> OTHER INFORMATION: Xaa at position 28 is Lys, Glu or Arg.
    273 <220> FEATURE:
    274 <221> NAME/KEY: MISC_FEATURE
    275 <222> LOCATION: (29)..(29)
    276 <223> OTHER INFORMATION: Xaa at position 29 is Gly or Aib.
```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/572,348

280 <221> NAME/KEY: MISC\_PEATURE

279 <220> FBATURB:

DATE: 02/08/2007

TIMB: 11:42:29

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Output Set: N:\CRF4\02082007\J572348.raw
 281 <222> LOCATION: (30)..(30)
 282 <223> OTHER INFORMATION: Xaa at position 30 is Arg or Lys..
 285 <220> FBATURB:
 286 <221> NAMB/KEY: MISC_FEATURE
 287 <222> LOCATION: (31)..(31)
 288 <223> OTHER INFORMATION: Xaa at position 31 is Gly, Ala, Glu or Lys.
 291 <220> FEATURE:
 292 <221> NAME/KEY: MISC_PEATURE
 293 <222> LOCATION: (32)..(32)
 294 <223> OTHER INFORMATION: Xaa at position 32 is Lys, amide or is absent.
 297 <400> SEQUENCE: 3
> 299 Xaa Xaa Glu Gly Thr Pho Thr Sor Asp Val Ser Xaa Tyr Leu Glu Xaa
 300 1
                                          10
 303 Xaa Ala Ala Xaa Glu Phe Ile Xaa Trp Leu Val Xaa Xaa Xaa Xaa Xaa
            20
 304
 307 <210> SEQ ID NO: 4
  308 <211> LENGTH: 39
  309 <212> TYPE: PRT
  310 <213> ORGANISM: Gila monster
 312 <220> FEATURE:
 313 <221> NAME/KEY: MISC_FRATURE
 314 <222> LOCATION: (39)..(39)
 315 <223> OTHER INFORMATION: Amidation of carboxy group.
  318 <400> SEQUENCE: 4
 320 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
                                          10
 324 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
                                      25
 325
                 20
 328 Ser Gly Ala Pro Pro Pro Ser
             35
 329
 332 <210> SEQ ID NO: 5
                                                  Same Eerer
 333 <211> LBNGTH: 44
 334 <212> TYPB: PRT
 335 <213> ORGANISM: Eynthetic construct
 337 <220> FBATURE:
 338 <221> NAME/KEY: MISC_FEATURE
 339 <222> LOCATION: (44)..(44)
 340 <223> OTHER INFORMATION: Amidation of carboxy group.
 343 <400> SEQUENCE: 5
 345 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
                     5
                                         10
 349 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
                 20
                                    . 25
 353 Ser Gly Ala Pro Pro Ser Lys Lys Lys Lys Lys
 354
             35
                                 40
```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/572,348

Input Set : A:\sequence listing.txt

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 02/08/2007 TIMB: 11:42:30 PATENT APPLICATION: US/10/572,348

Input Set : A:\sequence listing.txt Output Set: N:\CRF4\02082007\J572348.raw

## Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:2; Xaa Pos. 1,2,10,12,13,14,16,17,19,20,21,24 Seq#:2; Xaa Pos. 35,36,37,38,39,48 Seq#:3; Xaa Pos. 1,2,12,16,17,20,24,28,29,30,31,32

VERIFICATION SURGARY

PATENT APPLICATION: US/10/572,348

DATE: 02/08/2007 TIME: 11:42:30

Input Set: A:\sequence listing.txt
Output Set: N:\CRF4\02082007\J572348.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No

L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:40 M:259 W: Allowed number of lines exceeded, <223> Other Information:

L:50 M:259 W: Allowed number of lines exceeded, <223> Other Information:

L:200 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0

M:341 Repeated in SeqNo=2

L:224 M:259 W: Allowed number of lines exceeded, <223> Other Information:

L:234 M:259 W: Allowed number of lines exceeded, <223> Other Information: L:299 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0

N:341 Repeated in SeqNo=3